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**Amphibious Operations:  
The Operational Wild Card**

**A Monograph  
by  
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Armor**



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This monograph examines the utility of amphibious operations as a form of maneuver at the operational level. With the U.S. Army restructuring from a forward deployed force to a combat ready contingency force, forced entry operations become important. The two current options of forced entry are airborne and amphibious operations. The mission of the U.S. Army will not change. The change is in how the Army forces will deploy to initiate and support a successful land campaign. Additionally, the U.S. Army still has the requirement to organize, equip, and provide Army forces for amphibious operations.

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The monograph begins with a theoretical examination of amphibious operations as a form of operational maneuver. A historical study of how the U.S. Army employed amphibious operations as a successful and primary means of forced entry since the Mexican-American War follows. This historical study focuses on the impact amphibious operations had at the operational level. The study examines changes in the U.S. Army's doctrine, organization, training, and force requirements which impacts on the Army's ability to currently conduct amphibious operations.

The monograph continues with an analysis of amphibious operations against an established set of functions at the operational level. The analysis uses the five functions identified in the theory portion of the monograph, historically, and supported by FM 100-6 Large Unit Operations (Coordinating Draft). The functions of intelligence, maneuver, fire support, deception, and logistical support at the operational level are examined against the employment of amphibious operations.

The monograph concludes that amphibious operations are a viable operational maneuver, and that the U.S. Army ought to place increased emphasis on amphibious operations as a means to conduct forced entry operations. Additionally, the monograph examines the implications of the U.S. Army reviving this capability.



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## ABSTRACT

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World events are causing accelerated military changes. What was considered militarily viable in the not too distant past has been overcome by events as recent arms negotiations are progressing. The United States Army is presently restructuring from a forward deployed force to a deployable combat ready contingency force. The mission of the U.S. Army as outlined in FM 100-1, The Army, dated August 1986, "To conduct operations on land to defeat the enemy and seize, occupy, and defend land area essential to the land campaign,"<sup>1</sup> will not change. The change is in how Army forces will deploy to perform this mission. Recently, the U.S. Army Chief of Staff, General Carl E. Vuono, outlined the future capability of the U.S. Army in his guidance entitled, The U.S. Army a Strategic Force for the 1990s and Beyond, dated January 1990.

The Army of the future will have to be versatile, deployable, and lethal... The Army will require an Active Component sufficiently large and capable of providing both the forward-deployed elements and the U.S.-based forces needed for immediate contingencies and rapid reinforcement of forward-deployed units... In the future, the United States will also have to maintain an unquestionable ability to conduct an opposed entry into combat in defense of vital interests anywhere. In many contingencies, a forced entry will only be possible... While operational circumstances will determine which deployment mode is best in each case, the Army must have forces prepared to execute either option.<sup>2</sup>

The two options of forced entry are amphibious and airborne



operations. The mechanized battalion employed and vital to operation JUST CAUSE deployed to Panama by sea. "In general, amphibious operations are conducted to provide mobility to land combat forces. Specifically, they may be conducted to obtain a lodgement area in the initiation of a land campaign."<sup>3</sup> This capability supports the mission of the Army as outlined in FM 100-1, The Army.

Additionally, Joint Chiefs of Staff (JCS) Pub. 2 entitled, Unified Action Armed Forces (UNAAF), dated December 1986, requires the Army to conduct the following primary functions. "To organize, equip, and provide Army forces, in coordination with the other Military Services, for amphibious operations and to develop, in coordination with other Military Services, doctrines, tactics, techniques, and equipment of interest to the Army for amphibious operations."<sup>4</sup> A key issue generated by the future need to conduct forced entry operations to initiate and support a successful land campaign and the requirement to meet the guidance outlined in JCS Pub. 2 is what emphasis should the U.S. Army place on amphibious operations as a form of maneuver?

The methodology to answer this question begins with a theoretical examination of maneuver at the operational level. Then follows a historical examination of how the U.S. Army employed amphibious operations from the Mexican-American War to today. This historical analysis will focus on the impact amphibious operations had at the



operational level. The next section examines changes in the U.S. Army's doctrine, organization, training, and requirements impacting on the Army's ability to conduct amphibious operations. The analysis section will examine amphibious operations against an established set of functions at the operational level. The analysis will suggest whether amphibious operations are a sound operational maneuver when analyzed against these functions. This analysis will lead to a conclusion about amphibious operations for employment by the U.S. Army. The final section provides implications for future studies concerning Army/Joint amphibious operations.

## II. Theory

They want war too methodical, too measured;  
I would make it brisk, bold, impetuous,  
perhaps sometimes even audacious.<sup>5</sup>

Jomini

Successful campaigns begin with a plan to unhinge the enemy in such a manner as to cause moral or physical destruction of his forces. Maneuver which equates to the movement of forces in relation to the enemy is key in gaining the upper hand.<sup>6</sup> Our ability to maneuver causes the enemy to be kept off balance and can present opportunities for a quick strike against an enemy's weakness.<sup>7</sup> Jomini and Clausewitz both make it clear for a



campaign to be successful, an army must possess the ability to maneuver in order to achieve an advantage. However, individual unlinked tactical advantages do not achieve operational success. The ability to link a succession of tactical movements decides the campaign.<sup>8</sup> Field Manual 100-5, Operations, dated May 1986 states that, "Operational maneuver seeks a decisive impact on the conduct of a campaign. It attempts to gain advantage of position before battle and to exploit tactical success to achieve operational results."<sup>9</sup> The linking of individual tactical movements to operational maneuver is key to winning a campaign.

Operational warfare is an important aspect in winning a campaign, but what are the elements of this warfare? The classical military theorists, Clausewitz and Jomini, identify maneuver, surprise, and firepower as some of the ingredients.<sup>10</sup> Richard E. Simpkin a modern military theorist in his book, The Race to the Swift, adds deception<sup>11</sup> while the 1986 version of FM 100-5 adds reliable logistical support.<sup>12</sup> Using a combination of all four sources, operational warfare depends on the use of maneuver, surprise, deception, fires, and sustainment.

Operational warfare encompasses many maneuvers. One of these maneuvers is the classical operations on a flank or turning movement. In the theoretical sense, an amphibious operation could equate to the classical operations on a flank or turning movement as described by Clausewitz and



Jomini. Clausewitz wrote it down as a principle that a flanking maneuver is a dangerous maneuver, however when conducted in conjunction with another maneuver it will achieve the best result. In conducting a flanking maneuver the elements of mobility, surprise, deception, fires and logistical support are employed. Additionally, the flanking maneuver is considered an offensive form of combat.<sup>13</sup> Amphibious operations are also considered an offensive form of combat where the elements of mobility, surprise, deception, fires, and logistical support are employed. Amphibious operations are inherently linked to follow-on operations for the purpose of continuing a campaign.<sup>14</sup>

Amphibious operations were employed as a form of maneuver since antiquity. An attack from the sea has historically been a very bold and audacious act. The beginning of the Roman Empire has its roots in amphibious operations. During the Mithridatic War (88-84 B.C.) Rome married up its fleet with its superbly trained legions. This combination provided Rome the ability to conduct amphibious operations anywhere along the Mediterranean. Through the use of amphibious operations, Rome destroyed the Mithridates in 84 B.C. Pompey in a three month amphibious campaign against pirates in 67 B.C. restored Roman rule to the Mediterranean by destroying their ports.

Julius Caesar used amphibious operations in his campaigns during the Civil War. At the outbreak of



hostilities Caesar secured Sicily and Sardinia through the use of amphibious operations. He further used it as a flanking movement against Mark Antony's forces. Caesar's ability to conduct amphibious operations, capitalizing on the elements of surprise, mobility and flexibility gained him an Empire.<sup>15</sup>

Not only did Rome use amphibious operations to gain and control her Empire, but the British used them in much the same way. During the classical military period (1790-1820) the British used amphibious operations extensively to contain the French Grand Armee. In 1801 General Sir Ralph Abercromby was involved in several operations in the Mediterranean to control Napoleon's Grand Armee.

British fears over the remaining French were spurred by the growing amity between France and Russia and the recent defeat of Austria at Hohenlinden. Should France succeed in forming a coalition, Britain might be forced to withdraw from the Mediterranean. Bonaparte would not miss such a chance to reinforce his Egyptian command and revive his ambition against India.<sup>16</sup>

Abercromby turned most of the planning for the amphibious operation over to General John Moore. Moore's use of surprise, deception, mobility and fire support achieved a successful amphibious operation. An amphibious assault was conducted on 8 March 1801 at Aboukir in Egypt. The battle was won in the first twenty minutes when Moore's forces seized the central position. The operation was successful



and highly applauded, even by the French.<sup>17</sup>

General Moore in 1808 again led an amphibious operation in support of a land campaign against the Grand Armee in Spain. Moore's force of 25,000 troops would tie up almost 150,000 French troops until the embarkation of his forces on 18 January 1809. In 1812 the British under the command of the Duke of Wellington conducted another amphibious operation against the Grand Armee in Spain. This land campaign would tie up close to 300,000 French troops.<sup>18</sup>

These classical amphibious operations conducted by the British used mobility, surprise, deception, and firepower to advance operational warfare into a new dimension. This new dimension advanced the classical military art of operations on a flank into an important operational maneuver.

Bringing the discussion into the context of warfare today, amphibious operations are conducted to provide mobility to land combat forces. They are operations conducted to obtain a lodgement area for the initiation of a land campaign or to support an ongoing campaign as the British conducted in Spain; to obtain a site for an advanced base for logistical operations; to deny the use of the seized area to the enemy; to create deception; to gain information; or to destroy forces. Amphibious withdrawals can also be conducted to preclude the loss of a force. Amphibious operations integrate all types of forces in a concerted military effort.<sup>19</sup>



Mobility and flexibility are inherent characteristics of the amphibious operation. The amphibious operation exploits the element of surprise and capitalizes on enemy weaknesses through application of the required type and degree of force at the most advantageous locations at the most opportune times.<sup>20</sup>

In essence amphibious operations are a useful operational maneuver designed to maximize mobility, flexibility, surprise, deception, and fire support. The Roman and British Empires used them extensively to maneuver their forces to obtain an operational advantage. The U.S. Army has also used amphibious operations as a form of operational maneuver to its advantage.

### III. U.S. Army Amphibious Operations

Amphibious landing is the most powerful tool we have.<sup>21</sup>

General Douglas MacArthur

A historical overview of how the U.S. Army employed amphibious operations will be examined. The examination will include how the amphibious operation contributed to the overall campaign.

#### A. Mexican-American War

With the formal annexation of Texas by the U.S. on 1



March 1845, war with Mexico was inevitable. Initially, U.S. Army forces under General Zachary Taylor were outnumbered. General Taylor's initial reaction was to go on the defensive and wait until a larger force could be assembled for an offensive operation into Mexico. Taylor conducted a defense centered around limited offensive operations. This allowed General Winfield Scott to start his planning for an amphibious operation against central Mexico via Veracruz.<sup>22</sup>

The overland expedition under Taylor would become the anvil while Scott's landing at Veracruz would become the hammer. From January to early March 1847 Scott's plans were finalized and preparations made for the amphibious operation conducted on 29 March.

The amphibious expedition, mounted in the Tampico area, was 10,000 strong. Taylor's role was to be defensive, while Scott's mass of maneuver executed a bold turning movement into central Mexico.<sup>23</sup>

General Scott employed the elements of mobility, surprise, and firepower. Within five days after the sea and land bombardment against Veracruz, the city surrendered. For the remainder of the campaign, Scott was reinforced with additional troops landing at Veracruz.<sup>24</sup>

Scott's amphibious operation was an operation on a flank. It was conducted to obtain a lodgement area in the initiation of a follow-on land campaign. Scott occupied Mexico City on 14 September 1847, six months after his



amphibious landing. Scott's operation exploited the element of surprise and capitalized on enemy weaknesses located through aggressive reconnaissance.<sup>25</sup>

This lesson was not forgotten by soldiers who would take an active part in the Civil War. Lieutenant U.S. Grant was a distinguished member of Scott's expedition.

## B. Civil War

The Civil War was the first war where the U.S. Army had several theaters of operation. Operations were being conducted in the west and east to prosecute independent land and sea campaigns. To achieve these various campaign victories, joint operations came into fruition. Along with this entry into the arena of joint operations, amphibious operations became an important operational maneuver in many campaigns. Amphibious operations during the Civil War were conducted to support the following operational objectives: to obtain a site for an advanced base for naval operations; to destroy installations and forces; to deny the use of a seized area to the enemy; to obtain a lodgement area in the initiation of a land campaign; and to maneuver land combat forces incident to continuation of an existing land campaign.

In May 1861 a naval campaign was initiated to blockade key southern ports. Key sites were selected as ideal naval bases from which to launch the blockade. The first site



selected was Hatteras Inlet.

On 27 August 1861, a Union flotilla, under Flag Officer Silas H. Stringham, reduced Southern fortifications protecting this back door to the Confederacy, landed 800 troops from Fortress Monroe under Major General Benjamin F. Butler, and established a blockade.<sup>26</sup>

In November of the same year another amphibious operation was conducted at Port Royal.

Flag Officer Samuel F. du Pont led a joint expedition at Port Royal Sound, important inland waterway connecting Savannah and Charleston. His 9 warships overwhelmed the defensive forts, and 17,000 troops under Brigadier General Thomas W. Sherman were landed. Port Royal became an important naval base for the Union blockading squadrons.<sup>27</sup>

Both amphibious operations were conducted to obtain a site for an advanced base for naval operations. These amphibious operations against a hostile shore, supported the naval campaign against the South.

The war in the East in early 1862 was dragging on. President Lincoln forced General George B. McClellan, then General in Chief, into action. "McClellan decided to turn Johnston's positions by shipping his army by water to Fortress Monroe, thence overland."<sup>28</sup> Prior to such a bold and audacious move Roanoke Island, New Bern, and Beaufort needed to be neutralized. In February 1862 amphibious operations against these locations were initiated.

Union troops under Major General Ambrose E.



Burnside, convoyed by Flag Officer Louis Goldsborough, landed on Roanoke Island (February 7). After defeating the Confederate garrison (February 8), Burnside captured New Bern (March 14) and Beaufort (April 26).<sup>29</sup>

These amphibious operations destroyed enemy installations which could be used by the South to interdict McClellan's forces. Burnside's amphibious operations allowed McClellan to continue his campaign plan against Richmond.

In March 1862, McClellan began preparations to ship his army south. Having been reassured that Burnside's mission was successful and no counteraction was possible, the plan was initiated. On 2 April 1862 an amphibious operation was conducted to obtain a lodgement area in the initiation of a land campaign. This land campaign, known as the Peninsula campaign, lasted until July and included battles at Yorktown, Williamsburg, Seven Pines/Fair Oaks, and the Seven Day battles ending at Malvern Hill on 7 July 1862. The Peninsula campaign ended with an amphibious embarkation of the Union forces at Harrison's landing on the James River. The Peninsula campaign designed to "turn a flank" was initiated with a landing from the sea.<sup>30</sup>

Concurrent with the amphibious operations being conducted in the eastern theater of operations a similar action was ongoing in the western theater. From March to April 1862, Union forces advanced from the Gulf of Mexico and down the Mississippi to split the Confederacy. Commodore David G. Farragut moved into the Mississippi



River from the Gulf of Mexico to attack the town of New Orleans. On 24 April Farragut's ships carrying General Benjamin F. Butler's 10,000 troops started an assault toward New Orleans. The Confederate forts at St. Philip and Jackson were bombarded while General Butler's troops surrounded them. Upon surrender of these forts on 27 April the joint task force occupied New Orleans.<sup>31</sup> Farragut's joint amphibious operation was conducted to deny the use of a seized area (New Orleans) to the enemy.

The campaign on the lower end of the Mississippi was tied to the campaign ongoing in the north. General Ulysses S. Grant's campaign at Vicksburg was an amphibious operation in support of an existing land campaign. In December 1862, Grant sent Major General William T. Sherman with 40,000 men toward Vicksburg in an amphibious operation while he continued his advance overland. Having failed to take the bluffs around Vicksburg, Grant again used an amphibious operation to defeat the Confederates. This time Grant used an amphibious demonstration with Sherman's corps and Admiral David D. Porter's gunboats on the Yazoo River to draw attention while he crossed with his army 10 miles below Grand Bluff.<sup>32</sup> Grant's ability to use two different amphibious operations, first, to support an existing land campaign and, second, to draw attention away from his flanking movement resulted in a Union victory with the surrender of Vicksburg on 4 July 1863.

Amphibious operations played an important role in the



Union's ability to defeat the Confederate forces. They were key in providing mobility and flexibility to land forces at the operational level to support campaigns.

#### C. Spanish-American War

Three amphibious operations were conducted during the Spanish-American War. One was conducted in the Pacific and two were conducted in the Atlantic. The campaign against the Spanish forces in the Philippines started with Admiral George Dewey's defeat of the Spanish Navy. General Wesley Merritt's VIII Corps conducted an unopposed landing initiating a land campaign on 30 June 1898. Supported by Dewey's squadron, Merritt captured Manila on 13 August. This superbly organized and executed amphibious operation was a textbook example for future operations.<sup>33</sup>

The campaign against the Spanish forces in Cuba involved much the same action. The V Corps, under General William R. Shafter, conducted an unopposed amphibious landing at Daiquiri initiating a land campaign in June 1898. Shafter then moved on Santiago and, in July, the city surrendered. Another amphibious landing was conducted by General Nelson A. Miles on 25 July 1898 against Spanish forces on Puerto Rico.

Major General Nelson A. Miles, with some 5,000 men, landed and, in a well-planned, well-executed operation eliminated Spanish forces.<sup>34</sup>



These amphibious operations were conducted to initiate a land campaign against the Spanish forces. All landings were successful due in part to surprise, continued logistical support, and firepower provided by the Navy.

#### D. World War II

The use of amphibious operations during World War II by the U.S. Army is impressive. The Marine Corps took the lead in developing the doctrine. "They developed the landing craft-ramp type vessels, doctrine for fire support, and assault landings however, the U.S. Army was a large participant."<sup>35</sup> Out of 66 major U.S. amphibious operations during World War II, which involved a regimental combat team or larger, 10 were conducted by the Marines, 6 were Army-Marines, and 50 were conducted by the Army.<sup>36</sup>

If we multiply each operation by the number of divisions employed in amphibious operations, of which one hundred forty-three were U.S. Army and twenty-one were U.S. Marine divisions. Of these the U.S. Army landed forty-nine divisions against opposition and the U.S. Marines fifteen.<sup>37</sup>

The large number of landings conducted by the U.S. Army during the war shows the importance amphibious operations played as a form of maneuver. They were universally employed in the Pacific and Atlantic in four different theaters of operation. These theaters included the Mediterranean Theater of Operations (MTO), the European



Theater of Operations (ETO), the Southwestern Pacific Theater of Operations, and the Pacific Ocean Theater of Operation which included the North, Central, and South Pacific areas. A list of amphibious operations conducted in the Pacific and Atlantic during World War II are listed in appendix A.<sup>38</sup>

The amphibious operations conducted in World War II can be classified according to the following four operational purposes. (1) Invasion. This involved initial intervention by land combat forces into enemy controlled territory. It implied the intent to enter forceably an area and to occupy the territory. The land area was considered large enough where a follow-on land campaign must be conducted to defeat the enemy. (2) Seizure. This involved the capture of a portion of enemy controlled territory. The capture of an island falls into this category. (3) Maneuver. The operational purpose is a maneuver on a flank or turning movement designed to place land combat forces in a better location with respect to the enemy. This maneuver supports a land campaign already in progress. This operation is possible when the enemy controlled territory has already been invaded and is controlled in part by friendly land combat forces. (4) Special. This maneuver involved raids, demonstrations and reconnaissance missions into enemy held territory. These operations by themselves usually had little direct influence on the outcome of a campaign.<sup>39</sup>



In the invasion category the U.S. Army conducted the following amphibious assaults. In the MTO and ETO there were four. They included Northwest Africa, Sicily, Normandy, and Southern France. In the Pacific the initial landings on Guadalcanal, Papua-New Guinea, the Philippines and Okinawa fall into this category. In each case, the invasion was followed by a long and hard fought land campaign involving a large amount of forces. The landings in Sicily, Normandy, and Southern France involved two U.S. Army Groups and five U.S. Field Armies.<sup>40</sup> The landings in the Philippines involved two Field Armies while the landing on Okinawa involved one Field Army.<sup>41</sup> Corps size units were employed in the New Guinea, Guadalcanal, and Northwest Africa landings.

In conducting these operational invasions other objectives were achieved. These landings obtained sites for advanced air, naval, and logistical operations; destroyed enemy forces; denied key areas to enemy use; destroyed enemy installations; and obtained a lodgement initiating a land campaign. They were operational maneuvers designed to provide mobility to land combat forces.

In the seizure category the U.S. Army, along with Marine forces, conducted amphibious assaults in the Aleutians, Solomons, New Britain, Admiralty, Marshalls, Gilberts, Marianas, Carolines, and the northern islands of New Guinea. Some of these seizures were conducted totally by



Marine or Army units (appendix A). The seizure, as an operational maneuver, was conducted only in the Pacific theater. It was an operation designed to isolate key enemy held areas while continuing the advance toward Japan. The key Japanese base isolated and rendered useless through the use of seizure operations was Rabaul.<sup>42</sup>

In the process of conducting seizure operations the U.S. Army destroyed enemy forces and installations; obtained air, naval and logistical sites; denied these islands to the enemy's use; and obtained a number of lodgement areas for the continued advance against the enemy. The operational employment of this amphibious assault provided mobility and flexibility to U.S. land, sea, and air forces.

In the maneuver category the U.S. Army conducted the following amphibious assaults. In the MTO there were two. They included landings at Salerno and Anzio. Although the landings at Salerno and Anzio did not achieve the desired results, in theory the flanking maneuver was sound. The landing at Salerno was conducted to speed up the Allied advance up the Italian boot.<sup>43</sup> The landing at Anzio was designed to outflank the German defensive line known as the Gustav Line.<sup>44</sup> Operationally, the objectives were not achieved until additional combat power was built up in the lodgement areas. However, a large number of enemy forces were tied down defending against the Allied landings at Anzio and Salerno.

In the Pacific theater, amphibious maneuver was employed



by the U.S. Army in the Papua-New Guinea campaign.

"MacArthur -in a brilliantly executed series of amphibious operations- moved along the New Guinea coast."<sup>45</sup> "These accelerated flanking maneuvers advanced operations in the Southwestern Pacific by at least a month."<sup>46</sup> No less than ten of these flanking maneuvers were conducted during the Papua-New Guinea campaign.<sup>47</sup>

These operational maneuvers using amphibious assaults assisted the advance of U.S. forces by obtaining air and logistical sites, destroying enemy forces and installations, and assisting in the maneuver of land combat forces incident to an existing land campaign. They were operational maneuvers linking individual landings to an ongoing campaign.

In World War II amphibious operations were conducted to achieve operational victories. They were vital in initiating, maintaining, and linking movements to ongoing campaigns. Amphibious operations were used as an operational maneuver employing the theories developed by Clausewitz and Jomini. Although some of the amphibious operations did not meet with initial success, they were built upon a sound foundation. In essence they were an operational maneuver employed by the U.S. Army which helped win a war.

#### E. Korean War to the Present



The Korean War was the first limited war fought by the United States. The U.S. Army used its doctrine, weapons, and organizational structure from WW II. Historically, the Korean War witnessed one of the most successful operations in U.S. Army history, an amphibious operation. The Inchon landing was an operational maneuver designed to strike deep and cut the enemy's lines of communication to support an existing land campaign. X Corps achieved complete surprise and, through the mobility of its land combat forces, achieved an operational victory.<sup>48</sup> In the process X Corps obtained air and logistical sites, destroyed enemy forces, severed enemy lines of communications, obtained a lodgement area for the initiation of a land campaign northward, and assisted an existing land campaign ongoing in the south conducted by Eighth Army.

The Korean War also saw the employment of another maneuver using amphibious operations. It was the operational employment of an amphibious withdrawal. This operation was conducted in December 1951 at Hungnam Harbour. The X U.S. Corps was evacuated precluding its loss to enemy action. This operation allowed the X Corps to refit and be employed later in the theater of operations.<sup>49</sup>

The Korean War was the last time the U.S. Army employed amphibious operations as a form of maneuver at the operational level. Since then, the U.S. Army has undergone significant changes. These changes have significantly



impacted on the Army's ability to employ amphibious operations as a form of operational maneuver.

#### IV. Changes Impacting On Army Amphibious Operations

Since the National Security Act of 1947, there have been many changes impacting on the U.S. Army's ability to conduct amphibious operations. These changes can be classified as internal and external.

Internally, changes have occurred in three areas. First, the Army significantly altered its organizational structure which directly impacted on its ability to perform amphibious operations. The Army's Engineer Assault Brigades (EAB) organized during WW II were eliminated. According to FM 5-144 entitled Engineer Amphibious Units dated November 1966, the mission of the EABs was, "To provide shore party and amphibious assault vehicle elements required in amphibious landings."<sup>50</sup> During the war the Army formed six of these EABs, which contributed to the Army's amphibious successes. In a letter to General Marshall in March 1945, General Douglas MacArthur said:

In the succession of amphibious operations up the coast of New Guinea to Morotai, thence to the Philippines, the performance of the 2d, 3d, and 4th Engineer Brigades has been outstanding. The soundness of the decision in 1942 to form organizations of this type has been borne out in all actions in which they have participated. These units have contributed much to the rapid and successful prosecution of the war in the Southwest Pacific Area. I recommend



that careful consideration be given to the preparation and expansion of such units in the future Army setup.<sup>51</sup>

The 2d Engineer Amphibious Brigade was deactivated from the U.S. Army's active force list in 1965.

Second, the U.S. Army's doctrine on amphibious operations is outdated. JCS Pub. 2, entitled Unified Action Armed Forces, dated December 1986, stipulates that the Army is still responsible to, "Develop amphibious doctrine of interest to the Army."<sup>52</sup> The U.S. Army Command and General Staff College issued a program text (PT 6-1) to support its program of instruction (POI) on amphibious operations as late as 10 August 1981. However, the doctrine used by the CGSC manual had not been updated since the publication of FM 31-12 Army Forces in Amphibious Operations in March 1961. Additionally, "In September 1981, a Concept Paper on Army amphibious operations was developed and forwarded to the U.S. Army Infantry School specifically addressing doctrinal problems. To date, no response or actions to that paper have occurred."<sup>53</sup>

Third, training problems have negatively impacted on the Army's ability to conduct amphibious operations. The Army's amphibious schools at Camp Edwards and Carabelle were closed down in 1948. Since then, the Army has relied on the Marine Landing Force Training Commands to train Army units. However, no formal coordination with these centers exists with TRADOC.<sup>54</sup> Additionally, current Army Training Evaluation Plans (ARTEP)/Army Training Plans (AMTP) manuals



make no mention of the training tasks required to conduct amphibious operations. Units who make amphibious operations a part of their METL have no standards to guide them. The changes in the Army's organizational structure, doctrine, and training affected the Army's ability to conduct amphibious operations.

The external changes impacting on the Army's ability to conduct amphibious operations are in the following two areas. First, the total amphibious mission was perceived by the U.S. Army as going to the Marine Corps. "In 1948 the Marine Corps was given official blessing as the primary developer of amphibious doctrine, the Army turned its back on the subject and walked away."<sup>22</sup> The Marine Corps' position was based on the National Security Act of 1947. The Marine Corps had primary interest and responsibility in amphibious operations but, the Army was responsible for Army specific doctrine. Because of the fact the Marines were assigned primary responsibility, and through interpretation, became the sole developers. The Army did nothing to halt this misinterpretation.<sup>23</sup>

Second, the Army has focused on a forward deployed force since the '50s. Forward deployed units along with prepositioned equipment with personnel flown in from the U.S. would conduct land campaigns. With a forward deployed force already in theater, no large scale amphibious operation was seen as a requirement to gain a lodgement area. Additionally, the Army's focus on light divisions



resulted in airlift becoming the primary means of deploying forces to contingency areas. The Army for the past 40 years has been built upon a forward deployed force, and recently upon the deployability by air of light forces.

The external perceptions that the Marine Corps was the sole developer and user of amphibious operations and the Army was a forward deployed force influenced the Army's focus away from amphibious operations. The internal changes and external perceptions affected and influenced the Army's ability to conduct amphibious operations.

#### V. Analysis

As the U.S. Army reorganizes from a forward deployed force to a contingency force, increased emphasis will be placed on the need for force deployment. This shift places a renewed significance on the need for the U.S. Army to conduct amphibious operations. As historically shown, U.S. Army forces constituted the landing forces in most of the amphibious operations since the Mexican-American War. These amphibious operations were in accordance with the Army's primary mission as outlined in FM 100-1, The Army, and JCS Pub. 2, "To defeat enemy land forces and to seize, occupy, control, and defend land area."<sup>57</sup> Given the Army's reorganization plans and its continued mission, to prosecute and win a land campaign, we should re-examine the



employment of amphibious operations.

Today, in order to successfully accomplish operational warfare in any type of conflict, anywhere in the world, the U.S. Army must effectively employ the elements of maneuver, fire support, intelligence, deception, and logistical support.<sup>22</sup> But, one can legitimately question whether amphibious operations can meet the challenges and maximize those functions essential to sound operational warfare.

This study will use the five functions identified in the theory portion of this paper and supported by FM 100-6, Large Unit Operations (Coordinating Draft). The functions of intelligence, maneuver, fire support, deception, and logistical support at the operational level will be examined against the employment of amphibious operations. The analysis will focus on whether these functions are effectively used in amphibious operations.

Intelligence collection is vital to any successful operation. It is critical at the operational level of war due to the scope and duration of the operation. Additionally, given the broad range of enemy options, intelligence operations begin prior to and continue during an operation.<sup>23</sup> Intelligence is used to obtain a clear picture of the enemy's location, strength, capabilities, vulnerabilities, and intentions. Once a clear intelligence picture is developed actions against the enemy are possible. Intelligence is used to locate windows of vulnerability. Once these windows are detected, operations



to exploit the enemy's weaknesses and avoid his strengths are possible. By avoiding the enemy's strengths and attacking his weaknesses you are striking the enemy where he least expects it. An attack at an unexpected time and place from an unexpected direction achieves operational surprise.<sup>40</sup> Surprise is used during amphibious operations by striking the enemy when and where he least expects it.

To achieve this surprise, intelligence collection is used to locate gaps or weak areas in the enemy's positions prior to an amphibious assault. The amphibious assaults in New Guinea, Central Pacific, and Inchon were landings against weak areas or gaps located through intelligence. The one thing to avoid when employing amphibious operations is a landing against an enemy's strength. To prevent this, intelligence collection is important during all phases of the amphibious operation.

Early collection of information and dissemination of derived intelligence to meet landing force requirements are particularly important since planning for the overall operation stems from the landing force scheme of maneuver ashore. This, in turn, derives from estimates and decisions based primarily on intelligence of the enemy and the area of operations.<sup>41</sup>

When employing amphibious operations, the objective is to select the most opportune place and time for an attack while avoiding the enemy's strengths and attacking his weaknesses. Attacking the enemy's weaknesses is a result of good intelligence. Therefore, in amphibious operations



the use of intelligence is critical to the accomplishment of the objective.

Using intelligence to achieve surprise is one step in the operational warfare process. The second is having the ability to move forces at a critical time to a specific place. This is what operational maneuver aims to do. Maneuver is the movement of forces in relation to the enemy to secure or retain positional advantage. Operational maneuver demands mobility, flexibility, tempo, and economy of force.<sup>62</sup> These elements are also used in amphibious operations.

First, mobility is an inherent characteristic of amphibious operations. One of the objectives of amphibious operations is to provide mobility to land combat forces. Having located an enemy weakness, the capability to exploit this weakness must be used. A seaborne force capable of striking the enemy anywhere is what amphibious operations do best. "The seaborne force can shift its operational point of main effort faster than can a land based force. In the Third World areas today a seaborne force is more mobile than a land-based force."<sup>63</sup> The ability to provide a mobile force to strike where and when you choose is a decisive operational advantage. Employing amphibious operations maximizes the operational mobility of a force.

Second, the flexibility to conduct a variety of operations adds to the capability of employing amphibious operations. While the primary purpose of an amphibious



operation remains an assault from the sea to obtain a lodgement area in the initiation or to support a land campaign, other maneuvers are possible. Secondary types of amphibious operations are as follows: amphibious withdrawal; amphibious raids; amphibious demonstrations; and amphibious reconnaissance.<sup>64</sup> This capability to conduct various forms of maneuver adds to the flexibility of employing amphibious operations.

Third, amphibious operations permit operational tempo to be sustained throughout an operation.<sup>65</sup> A lost battle can cause the operational tempo to slow down. It is therefore important to avoid costly battles to maintain this operational tempo. Amphibious operations attempt to strike the enemy's weak areas or gaps, avoiding the costly strength on strength battles which slows down operational tempo. Amphibious operations focus on pitting strength against weakness. Therefore, an objective of an amphibious operation is to support and maintain the operational tempo.

Fourth, amphibious operations being a relatively smaller operation use battle sparingly. Its use provides the commander the opportunity to economize his forces.<sup>66</sup> The Central Pacific island hopping campaign and MacArthur's Papua-New Guinea campaign were economy of force operations avoiding battle wherever possible. Amphibious operations can be economy of force operations which avoid the enemy's strength and maneuver to conduct battle in the enemy's cybernetic or moral domains.



Mobility, flexibility, tempo, and economy of force are inherent characteristics of operational maneuver. During amphibious operations the functions of operational maneuver are employed to achieve an operational objective.

Operational fires are different from tactical fires in two ways. First, they are planned from the top down rather than from the bottom up. Most tactical fires are initiated at the lower levels and brought together at each higher level, while operational fires are established and designated by the operational commander and passed down to lower echelons for execution. Second, operational fires support operational maneuver by impacting on the enemy's movement, degrading his command and control, and disrupting his logistical support.<sup>67</sup> To accomplish these objectives, operational fires require close coordination at all levels, mobile fire support systems, and the protection of these systems.<sup>68</sup>

The two elements of operational fires are employed during amphibious operations. First, fire support in an amphibious operation is coordinated from the top down. The commander of the amphibious task force (CATF) has overall responsibility and control for fire support. Fire support is established, planned, and designated by the CATF until the landing force is established on shore. Fire support is then switched to the landing force commander who plans, controls, and designates them. In all phases of an amphibious operation fire support is a top down approach.<sup>69</sup>



Second, fire support during an amphibious operation is capable of providing deep fires by incorporating naval and aircraft assets in support of the ATF. Amphibious fire support goes hand in glove with the operational maneuver by interdicting the enemy's movement, command and control and sustainment before he can threaten the lodgement area. Coordination of these assets ensures they are employed with maximum effectiveness.<sup>70</sup> Coordination avoids duplication, reduces danger to friendly forces, and adequately uses time and ammunition. Fire support during an amphibious operation requires close coordination.

In addition to effective coordination, amphibious fire support is highly mobile and well protected. Inherently, a seaborne force is a mobile force which can move quickly to provide fire support. The ocean being a flat piece of terrain does not suffer from the degradation when compared to moving ground fire support elements. Seaborne assets can be shifted quickly to provide continuous fire support. This mobility adds to the survivability but, additional protection means are provided by air defense and early warning systems.

Fire support is important during amphibious operations. It is designed to strike the enemy close in and deep. Additionally, it is a highly coordinated effort which is mobile and provides self protection.

An integral part of any campaign or major operation is the deception plan.<sup>71</sup> Operational deception seeks to



manipulate the enemy's perceptions and expectations. It is designed to paint a false picture of reality, concealing friendly actions and intentions.<sup>72</sup> Due to the timing and scale, operational deception depends on plausibility, verification, and consistency of the deception story.<sup>73</sup> Success in amphibious operations depends on maximizing those elements.

First, the ability to move ships and deploy men and materiel by sea provides a plausible scenario of an amphibious attack. However, ship movements can be easily disguised as to their destination and what they are carrying. What appears to be an amphibious assault might be a feint or demonstration to draw attention away from the main effort. Moving ships can induce the enemy to take the wrong action ie, holding back key reserves for an anticipated amphibious assault or moving them to the wrong location. The believability of conducting an amphibious operation causes the enemy to ponder many possibilities.

Second, amphibious operations are easily verifiable. A large movement can not be concealed. But, this can be used to the advantage of an amphibious planner. An amphibious operation creates many unknowns for the enemy commander. The how, when and where this force will be employed causes the enemy to be reactive. Once reactive, the enemy surrenders the initiative and must cover all possibilities, from a simple reinforcement of ground troops already committed, to an assault to gain a lodgement area, or



simply a feint. Verifying an amphibious operation opens Pandora's box for the enemy.

Third, the ability to employ amphibious operations almost anywhere along a coast can cause the enemy to create weakly defended areas. Doctrinally, amphibious operations are employed to strike weak areas. If the enemy moves troops to reinforce likely assault areas, he weakens other areas. B.H. Liddell Hart in his book, Deterrent and Defense, points out that the capability of the Allies in WW II to employ amphibious operations caused the Germans to spread out their defensive line. In doing this, the Germans created a weak defensive line and conversely, had they strongly defended certain areas, they would have created gaps in their line. Employing amphibious operations can cause the enemy to reinforce the wrong areas thus creating weak areas for other operations.

Deception operations are inherently used during amphibious operations by employing feints, ruses, and demonstrations causing the enemy to be reactive surrendering the advantage of operational fluidity. Due to its believability, verifiability, and consistency, amphibious operations are a perfect operational deception in and of themselves.

Logistical support is a dominate factor in determining the nature and tempo of an operation. Logistics, if carefully planned and executed, will maintain the tempo of an operation, and allow the rapid movement from one phase



to the next.<sup>74</sup> Logistical planning and preparation are an integral part in all phases of amphibious operations. During each phase a detailed and systematic examination of all logistical factors is made. This detailed planning reduces the time required to make logistical decisions during the execution phase. Logistical planning for an amphibious operation is formal and deliberate, but has flexibility to meet emergency situations.<sup>75</sup>

First, all logistics planning for an amphibious operation is based on providing continuous and coordinated logistical support. Realizing that lead time for an item is a lengthy process and errors are not easily rectified, coordinated planning at all levels is essential. Due to the self contained nature of amphibious operations continuous and coordinated logistical support is easily maintained. Problems can receive timely emphasis without delays in coordinating key individuals and assets. This real time capability inherent in amphibious operations helps maintain the operational tempo.

Second, the system is designed to provide the operational commander positive and effective control over the logistical support. Due to the close proximity and the self contained nature of an amphibious operation, timely, complete, and accurate logistical information is available. The operational commander can make quick decisions and maintain positive control over the operation. This control enables the commander to maintain the operational tempo.



Third, the system is designed with flexibility. Doctrinally, provisions are made for the availability and prompt delivery of an emergency issue of supplies. Plans for the air delivery of critical supplies can be incorporated into the operation. Through a centralized process the emergency supply needs of the landing force and the means are paired to maintain the tempo.

Logistics is the Achilles heel in any operation. It is no different in an amphibious operation. However, the system is designed to provide coordinated and continuous support with effective and positive control, but be flexible enough to meet emergency situations. The key to operational logistical support is to maintain the operational tempo. In an amphibious operation supporting and maintaining the tempo is the key objective.

The functions of operational maneuver, fire support, intelligence, deception, and logistics are essential to large operations and campaigns. Amphibious operations have a high degree of utility to maximize those functions essential to operational warfare in achieving operational objectives. Amphibious operations, therefore, can meet the challenges and maximize those functions essential to sound operational warfare.

## VI. CONCLUSIONS.



The right operational maneuver is a goal for which armies have been searching. The Romans built upon amphibious operations as a way to control, expand, and maintain their empire. The British used them to contain the French "Grand Armee". Amphibious operations are ideal flanking or turning movements as described by Clausewitz and Jomini. They are offensive maneuvers designed to make the enemy react. An Army which is reactive surrenders the initiative.

The operational advantages of employing amphibious operations as a form of maneuver far outweighs the disadvantages. Amphibious operations will become increasingly more important as the U.S. Army restructures. With the Army restructuring its force from a forward deployed force to a contingency force, forced entry operations become a necessity. The Army ought to relook the use of amphibious operations as a viable operational maneuver to conduct a forced entry. Historically, when the U.S. Army was not a forward deployed force, it employed amphibious operations as the primary means of forced entry to conduct its mission.

Amphibious operations link a succession of movements and all types of forces in a concerted military effort. The U.S. Army used them as a means to provide mobility and flexibility to the operational commander. The U.S. Army used amphibious operations at the operational level: to initiate a land campaign, to support an ongoing campaign,



to seize enemy territory, to destroy enemy forces, to deny areas of interest to the enemy, and to obtain advanced basing for support operations. In addition, they were also employed as maneuvers to conduct an operational withdrawal preserving a force's combat power for future operations.

The U.S. Army has used amphibious operations to initiate land campaigns in every war since the Mexican-American War. During World War II and the Korean War amphibious operations were the operational wild card which turned the enemy's flank. The enemy's flank in North Africa, Italy, France, Papua-New Guinea, Philippines, Okinawa, the islands across Central Pacific, and Korea (Inchon) were all turned by the employment of amphibious operations. The U.S. Army provided forces in all but ten amphibious landings involving a regiment or higher in all wars since 1845.<sup>76</sup>

Operationally, the functions of intelligence, maneuver, fire support, deception, and logistical support are used to a high degree in amphibious operations. These operational functions are used to exploit the element of surprise and maintain the operational tempo gained in using amphibious operations. Employing amphibious operations capitalizes on the enemy's inability to defend everywhere and through inserting the required forces at the most advantageous location and most opportune time achieves victory.<sup>77</sup>

The mission of the U.S. Army as outlined in FM 100-1 The Army and JCS Pub. 2, "To conduct operations on land to defeat the enemy and seize, occupy, and defend land area



essential to the land campaign"<sup>76</sup>, will not change. The change will be in how the Army will deploy to perform this mission. Forced entry is going to become a necessity and amphibious operations have a proven track record as a means to defeat the enemy. Therefore, the U.S. Army ought to place increased emphasis on amphibious operations as a form of operational maneuver for the 1990s.

## VII. IMPLICATIONS

The two areas affected, if the U.S. Army goes back to employing amphibious operations as a form of maneuver, are in the joint arena and within the U.S. Army itself. First, within the joint arena, missions and roles between the Marine Corps and the U.S. Army must be clearly identified. The missions established in 1947 by the National Security Act made this point clear. "The function of the Marine Corps is to furnish forces to seize positions for advanced Naval bases and for the conduct of land operations essential to a Naval campaign. The function of the Army is to furnish forces for prompt and sustained combat incident to operations on land."<sup>77</sup> Clear lines of responsibility exist. However, it is not the mission of the Marine Corps or the U.S. Army to carry out these functions, but the responsibility of a Joint Force Commander. In addition to the roles and missions being refined and re-examined, joint



doctrine for amphibious operations must also be examined and refined.

Doctrine to integrate U.S. Army forces with Marine forces or Marine forces with Army forces in amphibious operations is a joint effort. By definition, when an amphibious task force is composed of Navy and Marine Corps forces only, the force is not a joint force and functions under naval doctrine. When an amphibious task force is composed of Navy and Army forces or Navy-Marine Corps and Army forces, the force is a joint force and functions under joint doctrine.<sup>22</sup> Historically, joint amphibious operations worked well during WW II and Korea. Therefore, a joint amphibious training center should be established and manned by personnel from all services.

The Marine Corps' amphibious training centers could be converted into joint amphibious training centers. The Marine Corps could continue to take the lead in the development of amphibious doctrine and materiel, however the U.S. Army should have a say in developing doctrine and materiel specific to its needs as currently required in JCS Pub. 2. Additionally, the U.S. Army detachments could be manned as the Marines currently man their detachments at the U.S. Army's service schools at Ft Knox, Ft Sill, and Ft Bliss. The U.S. Army's Training and Doctrine Command (TRADOC) should be the Army's principle agency to conduct this interface.

In addition to developing the joint doctrine and



training base, lift assets required to conduct amphibious operations must be thoroughly examined. The U.S. Army must identify its sealift requirements to initiate a land campaign. Current Navy sealift problems must be overcome for the U.S. Army to have this capability.

The joint arena has three hurdles to overcome. The first hurdle is defining and refining amphibious missions between the Army and Marine Corps. The second hurdle is the establishment of a joint amphibious warfare center. The third hurdle is defining sealift requirements for the U.S. Army to conduct its mission as directed in JCS Pub. 2. Simple cooperation between the Army and Marine Corps could overcome two of the three hurdles without much difficulty. The sealift problem would take time to overcome 30 years of neglect.

Within the U.S. Army a new mind set must be established. First, the mission for Army forces to prepare and conduct amphibious operations was never removed and remains a viable mission as directed in JCS Pub. 2. With the U.S. Army restructuring to a contingency force, forced entry capabilities must be revived. The simple fact is sealift is the only viable means to initiate and sustain a land campaign on a hostile shore. During WW II the U.S. Army was a leader in amphibious warfare. It conducted more landings on a hostile shore which were also larger in scope than any other service or nation conducted in history. To revive this capability the Army must re-examine its



doctrine, organization, and training requirements.

First, current U.S. Army amphibious doctrine is outdated. The Army ought to update its FM 31-12 Army Forces in Amphibious Operations dated March 1961. The updated FM would serve to complement the joint manual FM 31-11 Amphibious Operations. The doctrinal point of contact should be TRADOC which has responsibility for input into the joint manual. This would ensure a continuous link between the Army specific requirements and the joint requirements for amphibious operations.

Second, the U.S. Army ought to relook bringing back to active status the Engineer Assault Brigades (EAB). These amphibious units are Army units designed to provide specially qualified personnel and units for performance of combat support and interm combat service support functions as part of the Army force executing assault landings. These units were organized during WW II and kept on the active force structure until 1965.<sup>•1</sup> A recommended TOE is listed in appendix B.<sup>••</sup>

Third, amphibious training for units, personnel, and staffs should receive attention. Current ARTEP and AMTP manuals should be rewritten to include amphibious operations as one of the mission essential tasks for Army units. Additionally, personnel and staffs trained at the joint amphibious centers should be identified with a code for future assignment. This would ensure trained units, staffs, and personnel are identified and prepared to



execute contingency missions. TRADOC could become the executive agent for overseeing this training.

Internally, the U.S. Army must relook and revise its training, doctrine, and organization to become an active member and participant in the amphibious dialogue. TRADOC could take the lead in two of the three requirements without much difficulty. The organizational problem of bringing back on active status the EABs would face difficulty due to the current force reductions.

As the U.S. Army transitions from a forward deployed force to a contingency force, forced entry operations become more important. Historically, amphibious operations served the Army's needs well since 1845. Amphibious operations are operational maneuvers which have roots in classical military art. Additionally, amphibious operations are operational wild cards which have helped the U.S. Army conduct its mission since the Mexican-American War.



APPENDIX A



## MAJOR U.S. ARMY AMPHIBIOUS OPERATIONS

### WORLD WAR II

**NOTE:** The term "Major U.S. Army Amphibious Operations" is interpreted as those operations in which units of Regimental Combat Team (RCT) strength or larger were committed in the initial assault.

The category "assault forces" is limited to those U.S. units which landed from the sea on D-Day.

The following list is based on readily available sources in the office, Chief of Military History, and does not represent an official definitive statement on the subject.

### PACIFIC THEATER

#### Army Assault Landings

<u>Operation</u>	<u>Date</u>	<u>Assault Forces</u>
1. Attu	11 May 43	7th Inf Div (Reinf)
2. Woodlark-Kiriwina	22-30 Jun 43	112th Cav RCT and 158th RCT (both Reinf)
3. Nassau Bay	29-30 Jun 43	2 Bns 162d RCT
4. Kiska	21 Aug 43	1 RCT (Reinf) from the 7th Inf Div
5. Vella Lavella	15 Aug 43	35th RCT (Reinf)
6. Makin Island	20 Nov 43	145th RCT (Reinf)
7. Arawe (New Britain)	15 Dec 43	112th Cav RCT (Reinf)
8. Saidor	2 Jan 44	126th RCT (Reinf)
9. Admiralties (Manus)	15 Mar 44	7th and 8th Cav RCT's (1st Cav Div) (less some elements)
10. Tanahmerah Bay	22 Apr 44	24th Inf Div (Reinf) (less 1 RCT)



11. Humbolt Bay	22 Apr 44	41st Inf Div (Reinf) (less 1 RCT)
12. Aitape	22 Apr 44	163d RCT (Reinf)
13. Toem-Arara-Wadke Is.	17-18 May 44	163d RCT (Reinf)
14. Biak Island	27 May 44	41st Inf Div (Reinf) (less 1 RCT)
15. Noemfoor Island	2 Jul 44	158th RCT (Reinf)
16. Sansapor-Opmarai	30 Jul 44	1st RCT (Reinf)
17. Morotai Island	15 Sep 44	155th, 167th, and 124th Inf Regts with support troops (equivalent to one division)
18. Anguar Island	17 Sep 44	321st and 322d Inf Regts
19. Ulithi Atoll	23 Sep 44	323d RCT (Reinf)
20. Leyte	20 Oct 44	1st Cav Div; 7th Inf Div; 24th Inf Div; 96th Inf Div (all Reinf)
21. Ormoc	10 Dec 44	77th Inf Div
22. Mindoro	15 Dec 44	19th RCT and 503d Para RCT
23. Lingayen Gulf	9 Jan 45	6th Inf Div; 37th Inf Div; 40th Inf Div; 43d Inf Div (all Reinf)
24. Zambales	29 Jan 45	1 div plus 1 RCT
25. Nasugbu	31 Jan 45	187th and 188th Glider Inf Regts (both Reinf)
26. Mariveles (Bataan)	15 Feb 45	151st RCT (Reinf)
27. Palawan	28 Feb 45	186th RCT (Reinf)



28. Zamboanga	10 Mar 45	41st Inf Div (less 1 RCT)
29. Panay	18 Mar 45	40th Inf Div (less 1 RCT)
30. Cebu	26 Mar 45	Americal Div (less 1 RCT)
31. Negros (Northern)	29 Mar 45	185th RCT
32. Kerama Retto	26-29 Mar 45	77th Inf Div (less elements)
33. Legaspi	1 Apr 45	158th RCT (Reinf)
34. Ie Shima	16 Apr 45	77th Inf Div
35. Negros	26 Apr 45	164th RCT (less 1 Bn)
36. Macajalar Bay	10 May 45	108th RCT (Reinf)

Total Army Landings Pacific = 36

Unit Participation: Ten (10) Divisions and twenty-four  
(24) Regimental Combat Teams involved  
in the 36 landings.



# PACIFIC THEATER

## Joint Army-Marine Assaults

<u>Operation</u>	<u>Date</u>	<u>Assault Forces</u>
1. Russell Islands	21 Feb 43	Hq 43d Inf Div; BLT's 1 and 2 103d RCT; 43d Cav Ren Tp; 43d Sig Co; 3d Mar Raider Bn; Det 11 Marine Defense Bn
2. New Georgia Island	Jun 43	43d Inf Div (Reinf); 1st Mar Raider Bn; 4th Mar Raider Bn
3. Kwajalein Atoll	1 Feb 44	7th Inf Div; 4th Mar Div
4. Eniwetok	17 Feb 44	106th RCT; 22d Marines
5. Guam	21 Jul 44	305th RCT; 3d Mar Div; 1st Prov Mar Brigade (22d Marines and 4th Marines, Reinf)
6. Okinawa	1 Apr 45	7th Inf Div; 96th Inf Div; 1st Mar Div; 6th Mar Div

Total Landings = 6

Unit Participation, USA = 3 Divs and 3 RCT's.

Unit Participation, USMC = 4 Divs, 3 Regts, 4 Bns.

## Marine Assault Landings

1. Guadalcanal-Tulagi	7 Aug 42	1st Mar Div (less one regt, but reinf by a regt from 2d Mar Div and other special trps)
2. Bougainville	1 Nov 43	3d Mar Div (Reinf)
3. Tarawa	20 Nov 43	2d Mar Div (Reinf)
4. Cape Gloucester	26-27 Dec 43	1st Mar Div (Reinf, but less some elements)



5. Talasea	6 Mar 44	5th Marines (Reinf)
6. Emirau	20 Mar 44	4th Marines
7. Saipan	15 Jun 44	2d and 4th Mar Divs
8. Tinian	24 Jul 44	4th Mar Div (Reinf)
9. Peleliu	15 Sep 44	1st Mar Div
10. Iwo Jima	19 Feb 45	4th and 5th Mar Divs

Total Landings = 10

USMC Units = 5 Divs



# MEDITERRANEAN AND EUROPEAN THEATERS\*

## Army Assault Landings

<u>Operation</u>	<u>Date</u>	<u>Assault Forces</u>
1. Northwest Africa	8 Nov 42	1st Inf Div; 3d Inf Div; 9th Inf Div; 2d Armd Div; 168th RCT; 1 Bn of RCT 135; 1st Ranger Bn
2. Sicily	10 Jul 43	1st Inf Div; 3d Inf Div; 45th Inf Div; 2d Armd Div; 1st, 3d, and 4th Ranger Bns
3. Salerno	9 Sep 43	36th Inf Div; 45th Inf Div; 1st, 3d, and 4th Ranger Bns
4. Anzio	22 Jan 44	3d Inf Div; 6615th Ranger Force (Prov) (3 Ranger Bns with 83d Chemical Bn)
5. Normandy	6 Jun 44	1st, 2d, 4th, 9th, 29th and 90th Inf Divisions
6. Southern France	15 Aug 44	3d, 36th, and 45th Inf Divisions; 1st Special Service Force (Incl U.S. and Canadian troops of approximate regimental strength)

Total Landings = 6

Unit Participation = 9 Divs and 4 Bns

\*Note: There were no Marine or Joint Army-Marine amphibious landings in the MTO or ETO.

## Total U.S. Amphibious Landings in WW II

U.S. Army Amphibious Landings:	42
Joint Army-Marine Amphibious Landings:	6
U.S. Marine Corps Amphibious Landings:	10
Total:	58



APPENDIX B



e. *Organizational Concept.* Figure 4-1 is an example of a type EAB.

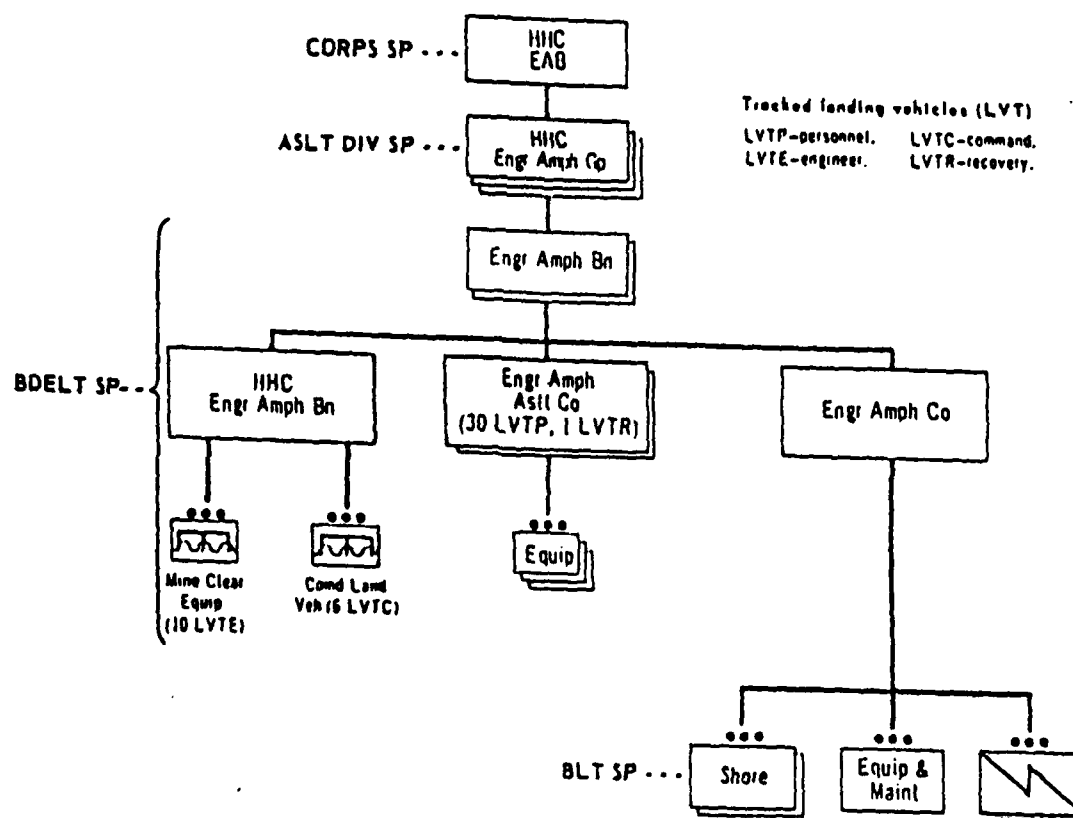


Figure 4-1. A type EAB.



(1) The EAB and the engineer amphibious group constitute control headquarters for SP operations. These control headquarters are attached to the supported corps and division(s), respectively. They remain attached until they are no longer needed in a support role.

(2) Engineer amphibious battalions provide command and control personnel and operating elements for SP operations on the beach. In addition, the battalions provide lightly armored amphibious vehicles for ship-to-shore and inland mobility for the landing force's initial assault waves. The engineer amphibious battalions are attached to BDELT's. Elements of the headquarters and headquarters company and engineer amphibious company are further attached to BLT's to serve as the nuclei for BLT SP's. The engineer amphibian assault company, equipped with the landing vehicle, tracked, personnel (LVTP), is usually attached to a single BLT, or elements may be attached to several BLT.

(3) The engineer amphibious units that form the basic nucleus for the various landing team SP's are released from attachment to the respective landing teams when the SP operations are consolidated at the next higher level. As soon as the amphibious assault portion of the operation is completed and the landing force is firmly established ashore (with normal combat support and combat service support elements), the SP should be dissolved and the engineer amphibious units relieved to support further operations or to start planning for the next amphibious operation. The engineer amphibian assault company normally remains attached to the BLT until inland objectives are secured or until relieved by the landing team commander. The company then reverts to control of the SP.

*f. Shore Party Command and Control.* Officers assigned to engineer amphibious units are trained to advise and assist landing force commanders in amphibious planning and preparatory activities and are specially qualified to command SP's. They prepare beach development plans for tactical commanders and coordinate the beach development plans of subordinate tactical elements.

*g. Headquarters and Headquarters Company, EAB.* Organized under TOE 5-401, the EAB consists of a headquarters and headquarters company capable of controlling from one to four amphibious groups. Figure 4-2 shows the organization of the headquarters and headquarters company, EAB.

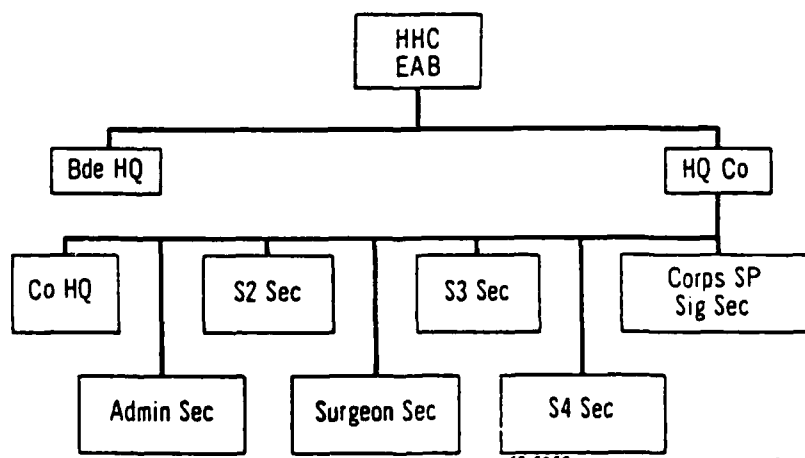


Figure 4-2. Headquarters and headquarters company, EAB.



(1) *Missions.* The brigade's missions are to--

- (a) Command, control, and administer the EAB and attached units.
- (b) Provide SP headquarters at corps.
- (c) Provide assistance in planning and executing amphibious and shore-to-shore operations, including landing on a hostile shore and crossing of major rivers and other water barriers.

(2) *Assignment.* The brigade is assigned to corps as required for special operations.

(3) *Employment.* The brigade coordinates and controls beach support area development initiated by multiple divisions engaged in the amphibious operation or assumes control of, and substantially expands, the beach support area development accomplished by a single assaulting division.

*h. Headquarters and Headquarters Company, Engineer Amphibious Group (EAG).* Organized under TOE 5-402, this group consists of a headquarters company that controls engineer amphibious battalions (with engineer amphibious and engineer amphibian assault companies) in any combination depending on operational requirements. Figure 4-3 shows organization of headquarters and headquarters company, EAG.

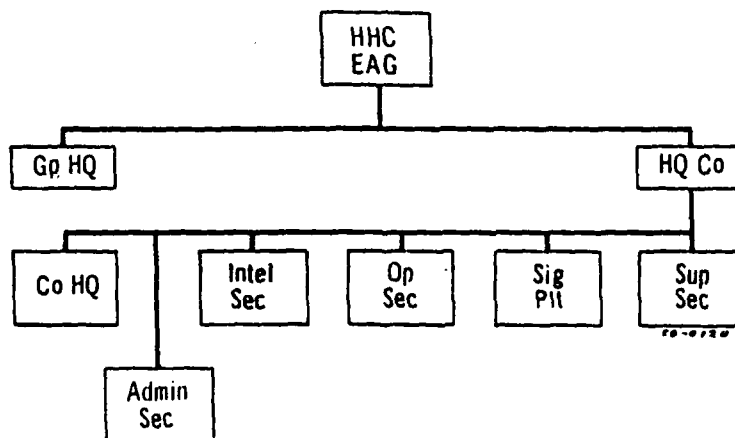


Figure 4-3. Headquarters and headquarters company, EAG.

(1) *Missions.* The group's missions are --

- (a) To command and control an assault division SP.
- (b) To perform engineer combat support and combat service support functions in support of tactical units engaged in amphibious, shore-to-shore, and major river-crossing operations.
- (c) To provide special skills and equipment needed to train other units assigned to amphibious, shore-to-shore, river-crossing, or similar missions.

(2) *Assignment.* The EAG is assigned to corps as required for special operations.

(3) *Employment.* The EAG provides command and control elements as the basic nucleus for an assault division SP and coordinates and controls beach support area development for an assault division.

*i. Engineer Amphibious Battalion.* Organized under TOE 5-405, this battalion includes a



headquarters and headquarters company, one engineer amphibious company, and two engineer amphibian assault companies. It provides the command and control nucleus and the operational (engineer, signal, and medical) elements for a BDELT SP. The control and operational elements provided in this SP are capable of supporting a BDELT with two BLT abreast over separated beaches. The battalion furnishes light armor-protected amphibious vehicles for minefield breaching and obstacle clearing; machinegun fire support; and tactical waterborne and land mobility for landing force assault elements, equipment, and supplies. Figure 4-4 shows the composition of the engineer amphibious battalion.

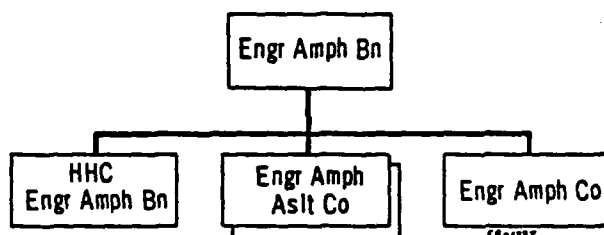


Figure 4-4. Engineer amphibious battalion.

(1) *Headquarters and headquarters company, engineer amphibious battalion.* Organized under TOE 5-406, this company provides normal command, staff, and administrative services. The battalion headquarters provides the SP command and control elements for one brigade (colored) beach. It will be normal to divide the maintenance section, the command landing vehicle section, the medical section, and the mine-clearing equipment platoon for employment on two beaches when the brigade is landing over separated beaches. The mine-clearing equipment platoon has 10 landing vehicles tracked, engineer (LVTE) for hasty removal of mines and reduction of natural and manmade obstacles. Elements of the mine-clearing equipment platoon are distributed among the landing teams that they support until inland objectives are reached, until they are no longer needed, or until other mine-clearing equipment has been landed. The BDELTSP assumes responsibility for the entire brigade beach support area when consolidated. Figure 4-5 shows organization of the headquarters and headquarters company, engineer amphibious battalion.

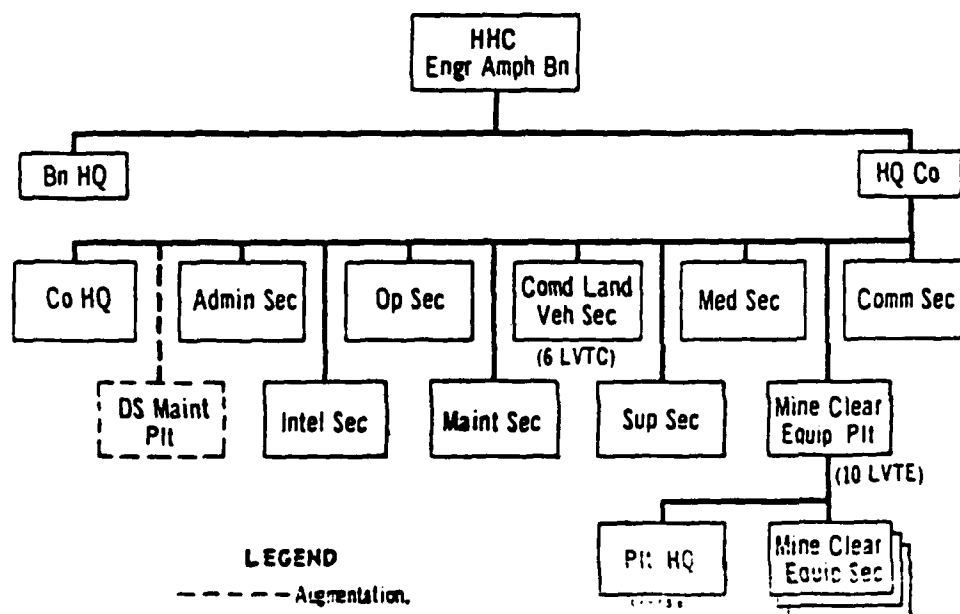


Figure 4-5. Headquarters and headquarters company, engineer amphibious battalion.



(2) **Engineer amphibious company.** Organized under TOE 5-408, this unit consists of a company headquarters, a signal platoon, an equipment and maintenance platoon, and two shore platoons. The company headquarters performs normal functions and, with the battalion headquarters and headquarters company, provides liaison elements with suitable communications equipment and personnel located at—

(a) Each assault BLT/BDELT headquarters.

(b) Tactical-logistical groups (TACLOG's) afloat. (Composed of designated landing force personnel, the TACLOG is a temporary liaison agency to advise Navy control officers aboard control ships of landing force requirements during the ship-to-shore movement.) The company will normally provide personnel (shore platoons) and equipment (shore platoons plus elements of the equipment section, equipment and maintenance platoon) for two battalion landing team (numbered) beaches. Each shore platoon, with a platoon headquarters and three pioneer and demolitions squads, is the nucleus for one BLT SP. Figure 4-6 shows organization of the engineer amphibious company.

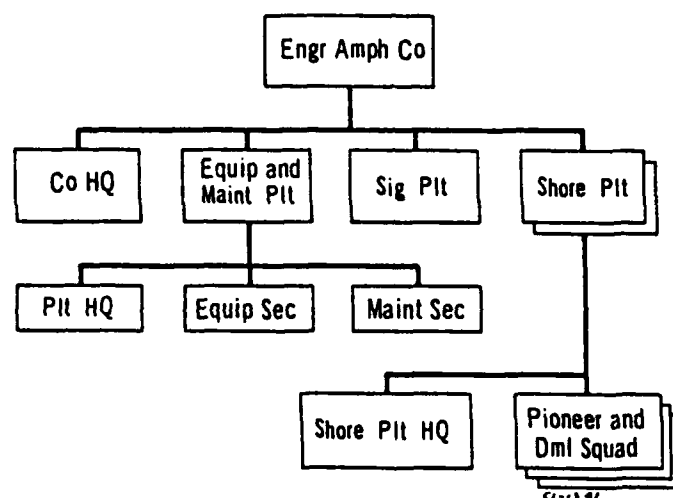


Figure 4-6. Engineer amphibious company.

(3) **Engineer amphibian assault company.** Organized under TOE 5-407, this company includes a company headquarters, three equipment platoons, and a maintenance section. Figure 4-7 shows organization of the engineer amphibian assault company.

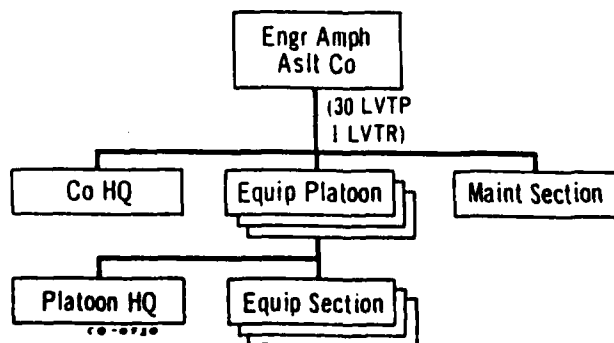


Figure 4-7. Engineer amphibian assault company.



## ENDNOTES

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- <sup>25</sup> Ibid. pp 19-23.
- <sup>26</sup> Dupuy and Dupuy, The Encyclopedia of Military History, P.873.
- <sup>27</sup> Ibid. p.873.
- <sup>28</sup> Ibid. p.873.
- <sup>29</sup> Ibid. p.873.
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